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REMARKS/ARGUMENTS

Claims 2-22 are pending in this application. By this Amendment, Applicant amends claim 13.

Applicant appreciates the Examiner's indication that claims 2-12 are allowed, and that claim 14 would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims.

Claims 13 and 15-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cross (U.S. 4,437,541) in view of Applicant's Admitted Prior Art (AAPA). Applicant respectfully traverses the rejection of claims 13 and 15-22.

Claim 13 has been amended to recite:

"A loudspeaker comprising:
a spherical or hemispherical vibrator;
a first baffle board having first and second major surfaces, said vibrator being mounted on the first major surface of the first baffle board so as to extend outwardly therefrom;
a second baffle board arranged so as to be spaced from the first baffle board; and
a plurality of spacers for connecting the first baffle board and second baffle board; wherein
the second baffle board is arranged such that the first baffle board is disposed between the vibrator and the second baffle board;
the first baffle board and the second baffle board are spaced from each other so as to define an open space between; and
only the plurality of spacers extends into the open space."
(emphasis added)

The Examiner alleged that Cross teaches all of the features recited in Applicant's claim 13, except for a spherical vibrator. The Examiner further alleged in the first full paragraph on page 3 of the outstanding Office Action that AAPA "discloses a conventional loudspeaker comprising a spherical vibrator 2 in figure 5 as prior art." Thus, the Examiner concluded that it would have been obvious "to use the configuration for the conventional vibrator disclosed in the [A]APA for the purpose of providing an improved spherical loudspeaker." Applicant respectfully disagrees.

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Applicant's claim 13 has been amended to recite the features of "the first baffle board and the second baffle board are spaced from each other so as to define an open space between" and "only the plurality of spacers extends into the open space."

In contrast to Applicant's claim 13, Cross teaches that "a predetermined amount of acoustically absorptive material is used between the baffles to control the intensity of the rear out-of-phase radiations which are routed to the sides of the speaker configuration" (see col. 5, lines 26-29 of Cross). In other words, Cross teaches that, in addition to the spacers 24, the acoustically absorptive material 18 extends into the space between the baffles 10 and 22.

Thus, Cross certainly fails to teach or suggest the features of "the first baffle board and the second baffle board are spaced from each other so as to define an open space between" and "only the plurality of spacers extends into the open space" as recited in Applicant's claim 13.

In addition, Applicant respectfully submits that it would not have been obvious to modify Cross so as to remove the acoustically absorptive material 18 from the space between the baffles 10 and 22, because Cross specifically teaches away from such a modification.

Particularly, Cross discloses that the acoustically absorptive material 18 must be provided between the baffles 10 and 22 of the loudspeaker so as to provide a low pass filter function. More particularly, lines 64-68 of col. 3 of Cross discloses that "a primary object of this invention [is] to provide a loudspeaker arrangement which provides a controlled dispersion acoustical sound pattern which has a particular application for both commercial and home audio systems," and lines 35-41 of col. 5 of Cross disclose that "given the directional characteristics of a speaker unit which are narrower at higher frequencies and approach omnidirectional at lower frequencies, the objective of a more constant frontal dispersion pattern can be achieved by routing the rear out-of-phase radiations to the sides through acoustically absorptive material."

The Examiner is reminded that it is error to find obviousness where references

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diverge and teach away from the invention at hand. W.L. Gore & Assoc. v. Garlock Inc., 220 USPQ 303, 311 (Fed. Cir. 1983).

In addition, since the acoustically absorptive material 18 of Cross must be provided between the baffles 10 and 22 to control the intensity of the rear out-of-phase radiations which are routed to the sides of the speaker configuration and to filter out the high frequency signals, the loudspeaker of Cross would be unsatisfactory for its intended purpose if the loudspeaker were modified so as not to include the acoustically absorptive material 18 between the baffles 10 and 22.

The Examiner is reminded that if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) and MPEP § 2143.01.

Therefore, Applicant respectfully submits that it would not have been obvious to modify the loudspeaker of Cross so as not to include the acoustically absorptive material between the baffles.

AAPA was relied upon to allegedly cure a deficiency of Cross. However, AAPA certainly fails to teach or suggest the features of "the first baffle board and the second baffle board are spaced from each other so as to define an open space between" and "only the plurality of spacers extends into the open space" as recited in Applicant's claim 13. Therefore, Applicant respectfully submits that AAPA fails to cure the deficiencies of Cross described above.

Furthermore, the Examiner has failed to explain why it would have been obvious "to use the configuration for the conventional vibrator disclosed in the [A]APA for the purpose of providing an improved spherical loudspeaker." Neither Cross nor AAPA teaches or suggests that a loudspeaker including a spherical or hemispherical vibrator would provide an improved loudspeaker. In view of the well-known differences in the operation and acoustical characteristics of a spherical vibrator and a cone speaker, Applicant respectfully submits that it would not have been obvious to use the spherical

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vibrator of AAPA in the loudspeaker.

The Examiner is reminded that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. In re Geiger, 815 F.2d 686, 2 USPQ 1276, 1278 (Fed. Cir. 1987).

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 13 under 35 U.S.C. § 103(a) as being unpatentable over Cross in view of AAPA.

In view of the foregoing amendments and remarks, Applicant respectfully submits that claim 13 is allowable. Claims 14-22 depend upon claim 13, and are therefore allowable for at least the reasons that claim 13 is allowable. Claims 2-12 are allowed, as indicated by the Examiner.

In view of the remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

To the extent necessary, Applicant petitions the Commissioner for a Three-Month Extension of Time, extending to October 8, 2005, the period for response to the Office Action dated April 8, 2005.

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The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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